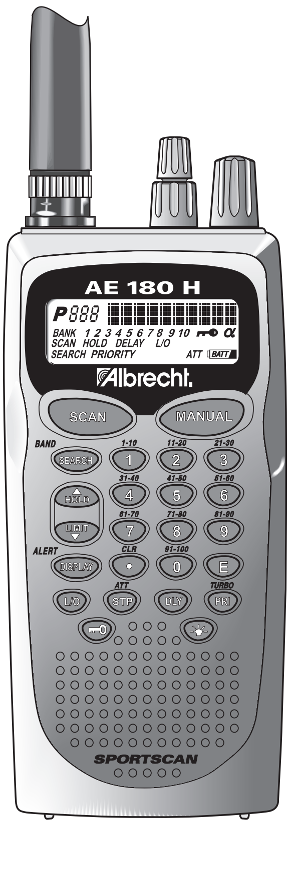
AE180H

100-Channel
Programmable
Twin Turbo
Hand-Held
Sports
Scanner



OPERATING GUIDE

Precautions

Before you use this scanner, please read and observe the following:

- **WARNING!**

  Albrecht **DOES NOT** represent this unit to be waterproof. To reduce the risk of fire or electrical shock, **DO NOT** expose this unit to rain or moisture.

- **IMPORTANT!**

  Be sure to use only the supplied earphone, or a stereo headset of the proper impedance (32Ω). Use of an incorrect earphone or other impedance may be potentially hazardous to your hearing.

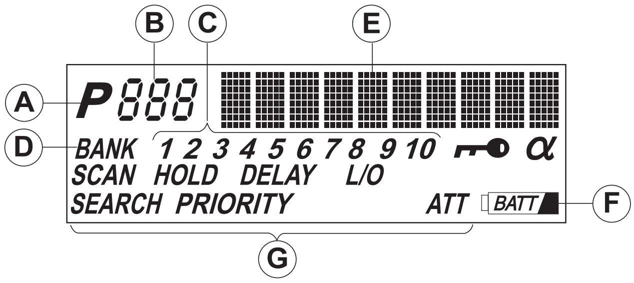
- **WARNING:**

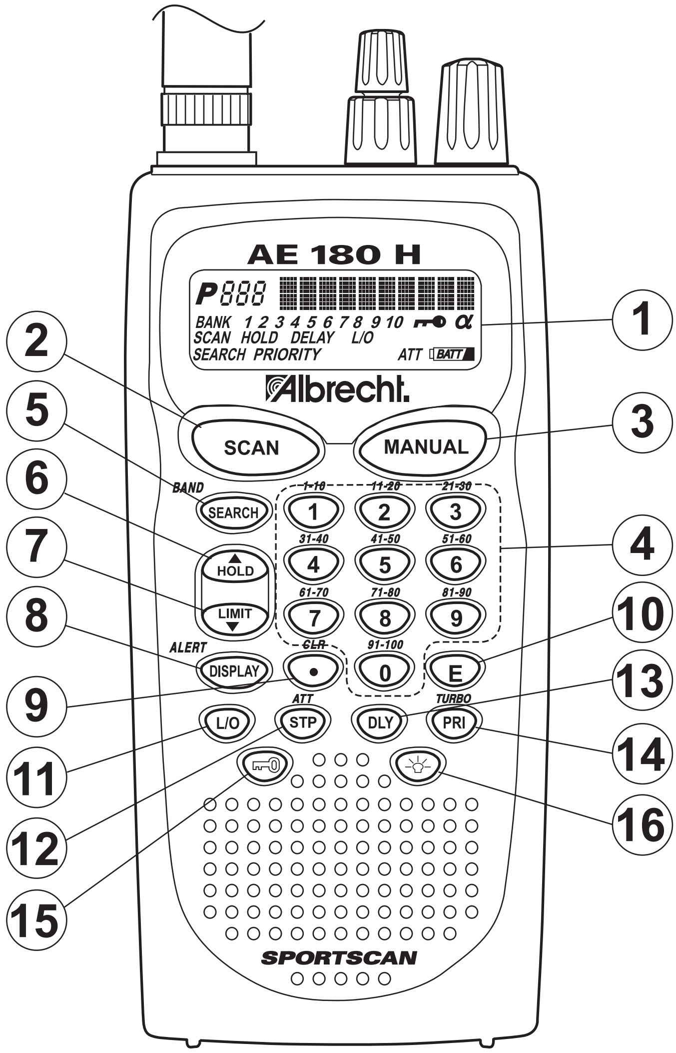
  Set the Volume to a comfortable audio level coming from the speaker before plugging in the supplied earphone or a stereo headset of the proper impedance (32Ω). Otherwise you might experience some discomfort or possible hearing damage if the Volume suddenly becomes too loud because of the Volume Control or Squelch Control setting. This may be particularly true of the type of earphone that is placed in the ear canal.

- **NICKEL-CADMIUM BATTERY WARNING**
  - This equipment contains a Nickel-Cadmium Battery.
  - Cadmium is a chemical known to cause cancer.
  - The Nickel-Cadmium Battery contained in this equipment may explode if disposed of in a fire.
  - **Do not** short circuit the battery.
  - **Do not** charge the Nickel-Cadmium Battery used in this equipment with any other AC Adapter/Charger other than the one designed to charge this battery (AD-235). Using another charger may damage the battery, or cause the battery to explode.

- **NICKEL-CADMIUM BATTERY DISPOSAL**

  Nickel-Cadmium Batteries Must Be Disposed Of Properly.


A
B
C
D
E
F
G
P888
BANK 1 2 3 4 5 6 7 8 9 10
SCAN HOLD DELAY L/O
SEARCH PRIORITY
ATT
BATT


AE 180 H
P888
BANK 1 2 3 4 5 6 7 8 9 10
SCAN HOLD DELAY L/O
SEARCH PRIORITY ATT BATT
Albrecht
SCAN
MANUAL
BAND
SEARCH
1-10
11-20
21-30
31-40
41-50
51-60
61-70
71-80
81-90
HOLD
LIMIT
ALERT
DISPLAY
CLR
91-100
E
ATT
TURBO
L/O
STP
DLY
PRI
SPORTSCAN
1
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Contents

About Your New AE180H

The **AE180H** is a brand new state-of-the-art information radio with automatic scanning capabilities. It can store frequencies such as sporting events, police, fire/emergency, and other communications into 10 banks of 10 channels each. Please be aware that restrictions apply on monitoring of non-public services. Respect national laws protecting privacy!

With the **AE180H**, you can do a fast search for active frequencies on all 13 preprogrammed bands. In the VHF bands with 5 kHz spacing and on all 100 stored channels you can also use the super fast Turbo Search Mode!

What is Scanning?

Unlike standard AM or FM radio stations, most two-way communications do not transmit continuously. The **AE180H** scans programmed channels at the rate of nearly 100 channels per second until it finds an active frequency.

Scanning stops on an active frequency, and remains on that channel as long as the transmission continues. When the transmission ends, the scanning cycle resumes until another transmission is received. Or, you can select an optional Delay so the scanner stays on the channel for 2 more seconds after the transmission stops, waiting for another transmission, before resuming scanning.

While the **AE180H** is scanning channels it is in “SCAN Mode”. When you stop the scanning with MANUAL, it is in “MANUAL Mode”.

What is Searching?

The **AE180H** can search each of 13 preprogrammed bands to find active frequencies. This is different from scanning, because you can search for frequencies that have not been programmed into your **AE180H**. You can also search within the range of frequencies you have programmed before. You can set the direction of searching as well as the speed. The Turbo Search feature, new for Albrecht scanners, can search VHF bands at up to 3 times the normal speed.

When the **AE180H** is searching for active frequencies, it is in “SEARCH Mode” or “TURBO SEARCH Mode”. When you stop the search with ▲HOLD, it is in “SEARCH HOLD Mode”. With both Turbo Scan and Turbo Search, your **AE180H** is truly a Twin Turbo Scanner.

Types of Communication

You will be able to monitor communication such as:

- » Automobile, boat, and marathon races
- » Sports and cultural events (e.g. Security staff)
- » Traffic information
- » Police and fire department (including rescue, in most countries monitoring not allowed!)
- » Land transportation, such as trucking firms, buses, taxis, tow trucks, and railroads
- » Marine and amateur radio.
- » Aircraft
- » Analogue cordless phones (in most countries listening not allowed)

And many more in the following 13 Bands:

RANGE (MHz)	STEP (kHz)	BAND	SUBJECT
25.0000-84.0100	5	FM	VHF Low PMR Band
84.0150-87.2550	20 with 15 kHz offset	FM	VHF Low PMR & Police Band
108.0000-136.9916	12.5/8.33 selectable	AM	Aircraft
137.0000-143.9950	5	FM	Military Land Mobile
144.0000-145.9875	12.5	FM	2 Meter Amateur Band
146.0000-155.9900	10	FM	VHF High Band
156.0000-162.0250	12.5	FM	VHF Marine Band
162.0300-173.9900	10	FM	VHF High PMR & Police Band
406.0000-439.9875	12.5	FM	UHF Low Band
440.0000-449.9875	12.5	FM	UHF Pager &PMR Band
450.0000-469.9900	10	FM	UHF Standard PMR Band
470.0000-512.0000	12.5	FM	UHF “T” Band (non-Europe)
806.0000-960.0000	12.5	FM	SRD and Cordless Phone Band

Where to Obtain More Information

Detailed information about frequency tables can be obtained from various scanner magazines, internet and book stores, as well as from contents for the radio enthusiasts. See also information on www.hobbyradio.de

Unpacking

Carefully check the contents against this list:

- **AE180H** Twin Turbo Sports Scanner
- Rubber Antenna
- AC Adapter/Charger (AD-235)
- Earphone
- Belt Clip with 2 Screws
- Battery (BP-180)
- This Operating Guide
- Nickel-Cadmium Battery Disposal Notice

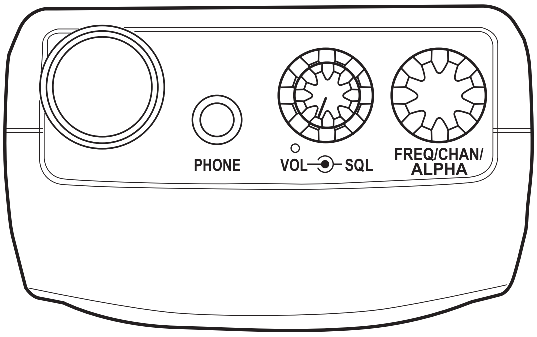
Please read this Operating Guide thoroughly before operating the scanner.

Feature Highlights

- **Twin Turbo Scan & Search** —This lightning-fast technology enables the **AE180H** to scan nearly 100 channels per second. Search speed is selectable between 100 and 300 steps per second. (300 steps per second only in bands with 5 kHz steps.) Because the frequency coverage is so large (see previous section for band listing), very fast scanning and searching are essential. That is why we combined our latest technology — Twin Turbo — into the **AE180H**.
- **100 Channels** You can program each of these memory channels to store one frequency.
- **13 Bands, 10 Banks** Includes 13 Bands, with Aircraft and 800 MHz. 10 Banks of 10 channels each are useful for storing similar frequencies in order to maintain faster scanning cycles.
- **25 MHz - 960 MHz** Indicates the range of frequencies that can be searched within the bands of your scanner.
  (***Note:*** *The frequency coverage is not totally continuous from 25.0 MHz to 960 MHz.)*
- **10 Priority Channels** You can assign *one* Priority Channel in each Bank. Assigning priority channels allows you to keep track of activity on your most important channel(s) while monitoring other channels for transmissions. (Priority Channels are initially set in the first channel in each Bank.)
- **Memory Backup** The stored channels are retained in memory permanently.
- **Programmable Alpha Characters** You can program up to 100 channels with alphabetical characters for easy reference.
- **Band Search** You can search within the preprogrammed bands.
- **Limit Search** You can search within a specific range of frequencies.
- **VFO Search** You can search by using the VFO control.
- **Alert Beep** If the **AE180H** finds a transmission on a channel you have preset, it beeps twice.
- **Auto Light** The **AE180H** can turn on its backlight automatically when it finds a transmission if this function is activated.
- **Attenuator** You can attenuate the strength of the strong signal inputted.
- **Air Band Step** You can select the AIR Band step from 12.5 kHz to 8.33 kHz.

Controls and Indicators

Top View



Antenna Connector	Connect the rubber antenna to the BNC connector and turn clockwise until it locks.
Earphone Jack	Plug the supplied earphone into this jack for private listening. When the earphone is connected, the internal speaker is disconnected. Note the warning on the Inside Front Cover and on page 11.
SQUELCH Control	Adjust this control to set the scan threshold and to eliminate the background rushing noise heard in the absence of an incoming signal. See the Operation Overview section for adjustment procedures.
ON-OFF/ VOLUME Control	Use this control to turn the scanner on or off, and to adjust the volume.
VFO Control	Use this control to select channels in Manual mode, select the band for Band Search, and select frequencies in Band/Limit Search mode. You can also use this to program Alpha Name characters.

Front View

(Refer to the illustration on page iii)

1. **LCD DISPLAY** — The liquid crystal display (LCD) shows the current channel and frequency. It also displays the mode, status, and bank indicators.
   A. **Priority Channel Indicator** — P appears when the scanner stops on a Priority Channel.

B. **Channel Number** — Indicates the current channel that the scanner is on.

C. **Memory Bank Numbers** — Each Memory Bank consists of 10 channels that you can select or deselect during scanning operation, using the numeric keypad. When you select a Bank, its number appears on the display. When you deselect a Bank, its number disappears from the display. When you press (MANUAL) to stop scanning, only the Bank of the current channel appears.

D. **Bank Indicator** — Appears with the Bank Numbers (1~10).

E. Frequency Indicator — Indicates the frequency being received by the scanner, or Alpha Name, etc.

G. **Mode/Function Indicators** — *(Only the active mode(s)/function(s) are displayed during operation.)*

SCAN	Indicates SCAN Mode.
SEARCH	Indicates SEARCH Mode. Flashes when in TURBO SEARCH Mode.
PRIORITY	Indicates PRIORITY SCAN is activated.
HOLD	Indicates SCAN HOLD or SEARCH HOLD Mode.
DELAY	Indicates DELAY is activated.
L/O	In SCAN Mode, indicates the channel shown is "Locked Out". In SEARCH Mode, indicates the frequency shown is "Locked Out".
ATT	Appears when the Attenuator function is set.
	Indicates the keypad is locked.
α	Appears when the display mode is Alpha Name mode.

2. Press (SCAN) to start scanning all programmed channels that are not locked out. (**SCAN** moves across the display during scanning.)

3. In SCAN or SEARCH Mode, press MANUAL to stop scanning. (HOLD appears on the display.)
   In Manual mode, press MANUAL to step up the channel.
4. **NUMERIC KEYPAD** — Use these keys to program a channel for scanning. Also use to access a channel directly with MANUAL . During SCAN Mode, use these keys to select or deselect any of the 10 memory banks. (Only the selected bank indicator(s) appear on the display.)

   Note: *You cannot deactivate all 10 banks at the same time.*

Key	Bank	Channel
1	1	1 - 10
2	2	11 - 20
3	3	21 - 30
4	4	31 - 40
5	5	41 - 50
6	6	51 - 60
7	7	61 - 70
8	8	71 - 80
9	9	81 - 90
0	10	91 - 100

5. Press SEARCH/***BAND*** to start Limit search.
   Press and hold SEARCH/***BAND*** to select the band for band search. Then press SEARCH/***BAND*** again to start band search.
6. Press ▲HOLD to stop Band serch and Limit search. Also, press it to move to next higher channel or frequency. Press and hold ▲HOLD to change the search direction to upper side.
7. In Limit search, input the frequency and press LIMIT▼ to program the lower/higher frequency. Press LIMIT▼ to stop Band search and Limit search. Also, press it to move to next lower channel or frequency. Press and hold LIMIT▼ to change the search direction to lower side.

8. Press DISPLAY/***ALERT*** to change the display mode when you program frequency or Alpha characters. Press and hold DISPLAY/***ALERT*** to set the Alert Beep function in Manual mode.
9. Use •/***CLR*** to enter the decimal point when programming a frequency into a channel. If you make an entry error, press •/***CLR*** before the E key to erase the entry, and start over. Also, use •/***CLR*** to clear the error message display.
10. Press E to store a displayed frequency and Alpha characters into any displayed channel.
11. Press L/O to "Lock Out" or prevent scanning of the displayed channel, including Priority Channels. (**L/O** appears on the display.) To unlock a channel, press L/O again. L/O can be used in Scan or SEARCH Modes.
12. There are two AIR BAND STEPs in the AIRCRAFT Range. Press STP/***ATT*** to switch the AIR BAND STEPs to find the appropriate range in your area. If you want to set or reset the Attenuator function, press and hold STP/***ATT***.
13. Press DLY to turn ON or OFF the automatic 2-second delay during scanning or searching for active frequencies. (When delay is activated, **DELAY** appears on the display.) In this mode, when the scanner monitors an active frequency, searching or scanning will not resume until transmission stops for 2 seconds.
14. While Scanning, press PRI/***TURBO*** to activate the PRIORITY SCAN function. (**PRIORITY** appears on the display.) While Searching, press PRI/***TURBO*** to toggle between 100 steps and 300 steps per second. (When in TURBO SEARCH is activated. **SEARCH** flashes on the display.)
15. Press and hold (key) until (key icon) *appears on the display. This disables the keypad and VFO control and prevents any accidental key entries. To enable the keypad, press and hold* (key) until (key icon) disappears from the display.
16. Press (light) to turn the LCD Back light on and off. Press and hold (light) for 2 seconds to make the scanner turn the LCD Back Light on when a transmission is found (Auto Light function).

Setup

The **AE180H** comes with a rechargeable Nickel-Cadmium Battery Pack. When fully charged, this Battery Pack will supply up to 12 hours of dependable use. (With the Squelch control in "closed" position.)

Before using the **AE180H** for the first time, or whenever the **LOW BATTERY** Indicator appears on the LCD display, you should fully charge the Battery Pack.

Note: *When the Battery Pack is low, the Low Battery Indicator will start to blink. After about 10 minutes, the scanner will shut itself off to prevent the battery from becoming completely discharged.*

Before charging, you must first install the Battery Pack according to the steps below.

Charging the Battery Pack

1. Plug the AC Adapter/Charger (AD-235) into the Charging Jack located on the left side of the **AE180H**. You can use the scanner while it is charging.

   WARNING! Use only the supplied AC Adapter/ Charger. Any other AC adapter or external power plug having over-voltage or reversed polarity can cause overheating or damage to the circuitry.

2. Plug the AC Adapter/Charger into a standard AC outlet.

   To fully charge the battery, leave the Adapter/Charger connected for 14 to 16 hours.

3. When charging is complete, disconnect the Adapter/ Charger from the AC outlet.

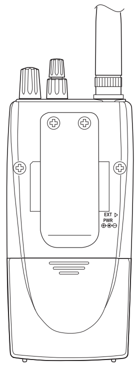
   Note: *Disconnect the AC Adapter/Charger from the unit during a power failure.*

Mounting the Flexible Antenna

Place the end of the antenna onto the BNC connector on top of the scanner and turn clockwise until tight.

Installing the Belt Clip

1. Place the Belt Clip on the mounting area on the back of the scanner, making sure the holes in the clip line up with the threads in the back of the scanner.



2. Insert the 2 screws into the corresponding holes and tighten.

CAUTION: *Do not tighten the screws too tight. You could damage the case or clip.*

Using the Earphone

The PHONE jack at the top of the **AE180H** is a standard 3.5mm stereo phone jack. You can use either the supplied earphone, or a stereo headset of the proper impedance (32Ω). The output of this jack is monaural audio, but you will hear it in both headphones of a stereo headset.

IMPORTANT!

Be sure to use only the supplied earphone, or stereo headset of the proper impedance (32Ω). Use of an incorrect earphone or other impedance headset may be potentially hazardous to your hearing.

WARNING: To avoid discomfort or possible hearing damage, be sure to set the Volume Control before plugging in the earphone or proper headphones. A sudden opening of the Squelch may cause unexpected loud audio.

Operation Overview

Note: *Before operating the* **AE180H** *for the first time, make sure you have fully charged the Battery Pack.*

1. Before turning on the scanner, rotate the Squelch Control fully clockwise.
2. Turn the scanner on by rotating the On-Off/Volume Control clockwise until you hear a click. Turn the Volume Control a small amount clockwise to a low listening level.
3. You should hear either a “rushing” noise or some communications. If you are monitoring a transmission, wait until it stops before adjusting the Squelch Control.
4. Readjust the volume to a comfortable listening level.
5. Turn the Squelch Control counterclockwise *just* until the rushing noise disappears. At the squelch threshold, any incoming signal just slightly stronger than the noise will open the squelch. Any communication that is received will open the Squelch, and stop scanning or Searching.

Note: *If squelch is set too tight, that is, too far* ***counterclockwise*** *from the threshold point, a much stronger signal is required to open the squelch. If squelch is set on a point* ***clockwise*** *from the threshold, you will hear a constant sound (noise, if no signal is present.) The scanner will not scan.*

The **AE180H** has 100 memory channels, each of which can be programmed to store one frequency. The channels are divided into ten 10-channel banks, useful for storing similar frequencies in order to maintain faster scanning cycles.

You can monitor communication in one of two ways:

- **BANK** SCAN If you have programmed channels, you can scan all programmed channels in the selected bank(s), except locked out channels. When the scanner stops on an active frequency, it remains on that channel as long as the transmission continues. When the transmission stops, the **AE180H** resumes scanning. If the Delay Function is on, the scanner remains on the same channel for 2 more seconds, waiting for a responding transmission. If there is no responding transmission within 2 seconds, the scanning cycle resumes.

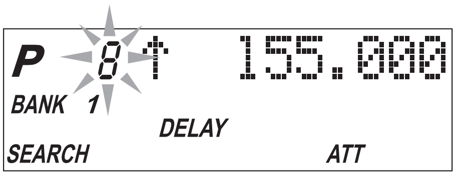
Any channels that are not programmed (000.0000) are skipped during scan.

When the **AE180H** is in SCAN Mode, the display will look something like this:



■ **SEARCH** The Search function is *different* from Scan. When you select a frequency band to search, the scanner searches for any active frequency within the lower and upper limits of the band. Also, when you program frequency range, you can search within the frequency range. When an active frequency is found, the scanner stops on that frequency as long as the transmission lasts. If the Delay Function is on, the scanner remains on the same channel for 2 more seconds, waiting for a responding transmission. If there is no responding transmission within 2 seconds, the search cycle resumes.

When the **AE180H** is on SEARCH Mode, the display will look something like this:



Programming Channels

Before you can scan, you must program the channels within a bank. You can store one frequency per channel, up to 100 channels.

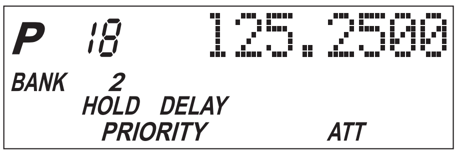
Note: *If appears on the display (keypad Locked), unlock the keypad by pressing and holding until disappears.*

There are two ways to program a channel:

- Manually select a channel and frequency, using the numeric keypad.
- Search a band to find an active frequency, and then directly store it into a channel.

A. Programming By Manual Entry

1. Select a frequency from the appropriate Frequency Directory.
   Example: Program 125.2500 MHz into Channel 18.
2. Make sure the scanner is in the SCAN Mode. If it is in the SEARCH Mode, press SCAN.
3. Press MANUAL to stop scanning.
4. Press 1 8 MANUAL to go to Channel 18.
5. Enter the frequency number using the numeric keypad. (Be sure to include the decimal point.)
   1 2 5 • 2 5.
   If you make a mistake and want to clear the entry, press • twice and re-enter the frequency.
6. Press E to store the entry. The frequency on the display will blink twice to confirm the programming.

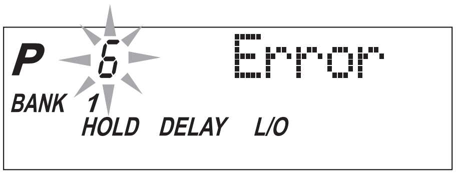


7. If that frequency is already stored in another channel, you will hear a “beep”, and the other channel number will appear on the display. If you want to store the frequency in the selected channel (18) as well, press (E) again. The frequency will blink twice to confirm the programming. Or, you can press (•) and enter another frequency for the currently selected channel.

   Note: Any frequency already stored in any channel will automatically be replaced by the new one.

8. If you try to enter a frequency that is outside one of the 13 Bands, you will hear a “beep”, and the word “**Error**” appears on the display.

   Press (•) and re-enter the correct frequency.



9. To program another channel, repeat the above procedures.

Deleting a Stored Frequency

To delete a frequency from a channel:

1. Display the channel and frequency that is to be deleted.
2. Press (0) on the numeric keypad.
3. Press (E). The current channel is erased, and the display shows **000.0000**.

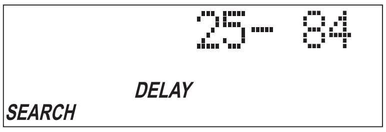
   Note: *That channel will be skipped during scanning.*

B. Programming SEARCH

The Search feature enables you to rapidly search for active frequencies within the specified band limits. When an interesting frequency is found, you can store it into a channel using the procedure below. For more information about SEARCH Mode, see the section titled “Searching”.

1. Press and hold (SEARCH)/***BAND*** to enter the BAND SEARCH Mode.

2. Press and hold the (SEARCH) /***BAND*** key to display the preprogrammed Search Bands. Use the (▲ HOLD) and (LIMIT ▼) keys or VFO control until you see the Band you want.



3. Wait for at least 2 seconds or press (SEARCH) /***BAND*** for Search to begin. If you wish to change the search direction, press and hold (▲ HOLD) or (LIMIT ▼) to search in an up or down direction.
4. When Search stops on a desired frequency, press (▲ HOLD) to stay on that frequency. The next available empty channel to store the frequency will be blinking on the display.
5. To store the displayed frequency into that channel, press (E) . The frequency will blink twice to confirm the programming.
6. To store the displayed frequency into another channel:

   a. Select the channel number with the numeric keys, and press (▲ HOLD). The selected channel will appear on the display. The frequency currently stored in the channel will appear for 2 seconds and then will be replaced by the frequency located from the search.

   b. Press (E). The frequency will blink twice to confirm the programming.

Note: *If all channels have already been programmed and (E) key is pressed, "Full" is displayed. To program the frequency, press (E) key again. To cancel the programming, press (•) key.*

Programming Channels with Alpha Characters

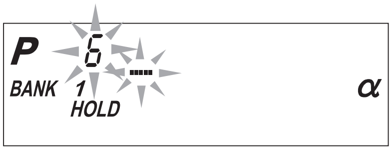
Use this feature to name channels (up to 100 channels) for easy reference.

1. Select the channel.

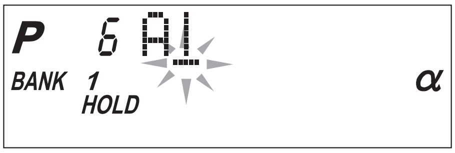
2. Press (DISPLAY) /***ALERT*** to go to the Alpha Name display, "α" appears on the display.

3. Press (E). The Edit cursor flashes.

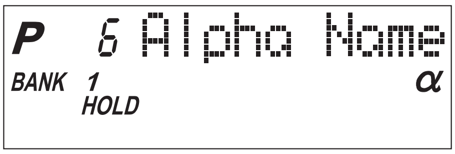
   Note: *If the frequency of the channel has not been programmed, you cannot program the Alpha Name on the channel.*



4. To select the edit position, press (▲ HOLD) to move the Edit cursor to the right or (LIMIT ▼) to move it to the left.
5. Select the character using VFO Control. Turn clockwise to move 0 - 9, A - z and other characters and stop the control at the letter you wish to store.
6. Repeat the steps 4 and 5 for all the characters you want to program.



7. When you complete the input, press (E). The words you have programmed flash twice.



Alert Beep Setting

When a transmission occurs on a channel on which you have set the Alert Beep function, 2 beeps will let you know that your “favorite” channel has been received.

You can set this function for each channel. Select a channel, then press and hold (DISPLAY)/***ALERT*** to set this function on a channel in Manual mode.

A appears on the display. (Except Alpha Name display)

You cannot set this function for the channels which have not programmed before.

Scanning

Bank Scanning

1. If ***SCAN*** is not indicated on the display, press SCAN. The **AE180H** should begin scanning.

The indicators for the selected Banks (**1** through **10**) appear on the display. The indicator of the Bank currently being monitored flashes. While the **AE180H** is scanning, the word ***SCAN*** **moves across the display.**

Scanning stops on any active channel that is not "Locked Out", and displays the Channel Number and frequency or Alpha Name. Scanning resumes automatically after the transmission stops.

2. You can deselect any bank(s) from being scanned by entering the number of the bank. The deselected bank indicator(s) disappear from the display, and those channels will not be scanned. This procedure helps to speed up the scanning cycle.

   Note: *One Bank must always be active. You cannot deactivate all 10 banks at the same time. If you try to deactivate all 10 Banks, Bank 1 will automatically be active.*

3. To restore any bank for scanning, just enter its number again. The bank indicator will reappear on the display.

4. To stop scanning any time, press MANUAL. (***HOLD*** appears on the display.) The scanner remains on the displayed channel, and only the bank indicator for that channel appears. Press SCAN, to resume scanning.

5. When you are stopped at a channel, you can press LIMIT ▼ to step down a channel, or ▲ HOLD to step up a channel. Press and *hold* either key to rapidly step through the channels.

   Note: *You do not skip a locked out ("**L/O**") channel when you use LIMIT ▼ or ▲ HOLD.*

To access a specific channel:

1. Press MANUAL.

2. Enter the channel number using the numeric keys.

3. Press MANUAL again.

Priority Scan

The **AE180H** has 10 Priority Channels, 1 per Bank. Initially these are the first channel in each Bank. (e.g. Channel 1, Channel 11, Channel 21, and so on.) In priority scan mode, the scanner checks the Priority Channel(s) every 2 seconds during the Scan cycle. If a transmission is received, the scanner will stop at that channel. If the Priority Channel in any Bank is “Locked Out”, it will be skipped during scanning.

You can move the Priority to any other channel in a Bank as follows:

1. Go directly to that channel using any of the methods described above.

2. Press and hold PRI for at least 2 seconds. You will hear “two beeps,” and **P** will appear on the display to the left of the new channel number. That channel will now be the Priority Channel for that Bank. (The **P** will no longer appear for the previous Priority Channel.)

To activate Priority Scan, press PRI. The **PRIORITY** indicator will appear at the bottom of the display. To deactivate Priority Scan, press PRI again. The **PRIORITY** indicator will disappear from the bottom of the display.

Delay

Normally the scanner will resume scanning when a transmission stops. If you want to remain on a channel until a responding transmission is received, activate the DELAY feature. This feature can be active in SCAN and SEARCH.

1. Press DLY. The **DELAY** indicator appears on the display. The scanner will now pause 2 seconds after transmission stops before resuming scanning.

2. Press DLY again to deactivate Delay. The **DELAY** indicator disappears from the display.

Locking Out Channels

You may have programmed certain channels that you do not want to hear every time you scan. These might be channels that are busy a major portion of the time, causing the scanner to stop at the channel(s) often enough to interrupt the scan cycle. You can Lock Out those channels so they are not scanned.

1. Go directly to the channel using any of the methods described above.
2. Press L/O. **L/O** appears on the display.

That channel is now “Locked Out” of the scanning cycle.

To include the channel back in the scanning cycle:

1. Go directly to the desired channel.
2. Press L/O. The **L/O** indicator now disappears from the display, and the channel is no longer “Locked Out”.

You can lock out any or all of the Priority Channels in the same way as other channels. If you lock out <u>all</u> Priority Channels you will see this message:



You can also remove **L/O** from all “Locked Out” channels in the <u>selected</u> Scan Banks (those appearing on the display.) Press and hold L/O for at least 2 seconds. You will hear 2 beeps and all channels except empty channels (000.0000MHz) are returned to the scanning cycle in the <u>selected</u> Scan Banks.

> ***Note:*** *Any “Locked Out” channels in Banks that are deselected are still “Locked Out”.*

Looking for “Locked Out” Channels

During scanning, you will not see “Locked Out” channels. To look for “Locked Out” channels, first press MANUAL to stop scanning. Then use ▲HOLD or LIMIT▼ to step through the Bank. You will see **L/O on the display to indicate a “Locked Out” channel.**

Searching

Band Search

The **AE180H** has 13 Preprogrammed Search Bands. You can search any of these Bands to find desired frequencies if you do not have a Frequency Directory handy, or if new stations have been added since the Directory was published.

1. Press and hold SEARCH/***BAND*** to enter the Band Search Mode. Then the upper and lower limits of the band currently selected are displayed.
2. Use VFO control, ▲HOLD or LIMIT▼ to select the band you wish to search.
3. Wait for about 2 seconds and the **AE180H** will begin searching that Band. Or, press SEARCH/**BAND** again to begin.
4. During a Search, press PRI/***TURBO*** to activate TURBO SEARCH. This increases the Search Speed to 300 steps per second in those bands that have 5 kHz steps. (See the table on page 3 for the Band Chart.) When you activate TURBO SEARCH, the SEARCH indicator flashes. Press PRI/***TURBO*** again to deactivate TURBO SEARCH.
5. Press ▲HOLD at any time to stop the search on a frequency. Press SEARCH/***BAND*** to resume searching.
6. When Search is stopped, you can press ▲HOLD or LIMIT▼ to move up or down 1 frequency step. (See the table on page 3 for the step size for each Band.)

Limit Search

In Limit Search mode, you can search within the frequency range you have set.

To use this function, you must set the lower/higher frequency of your search range first.

Setting the Frequencies

1. Press MANUAL.
2. Enter the lower limit of your search range.
3. Press LIMIT▼.

4. Enter the higher limit of your search range.

5. Press (LIMIT ▼) .

Using the Limit Search

1. Press (SEARCH)/***BAND*** to enter Limit Search mode.

2. Press (▲HOLD) or (LIMIT ▼) to stop searching. (”HOLD” appears on the display.)

VFO search

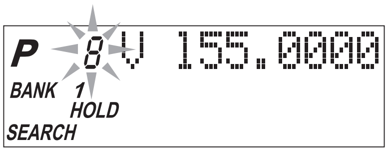
You can search by using VFO control.

1. In Manual mode, enter the frequency by using the number keypad and turnVFO control.

   -- OR --

In Band Search or Limit Search, press (▲HOLD) then enter the frequency by using the number keypad, and turn the VFO control.

“ **V** ” appears on the display.



2. Turn the VFO control clockwise to move up the frequency step, and turn the VFO control counter-clockwise to move down the frequency step.

3. When you wish to store frequency or change the channel, you need not press (▲HOLD) first.

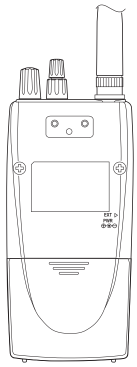
Search Skip Frequency

The scanner may stop at certain frequencies during Search that you do not want to hear. You can program up to 50 Skip Frequencies into the **AE180H**. When the scanner stops at one of these frequencies during Search, press (L/O). That frequency is now “memorized” and will be skipped during any Search. The scanner will then search to find other active frequencies. If you enter the 51st frequency, the 1st one is overwritten.

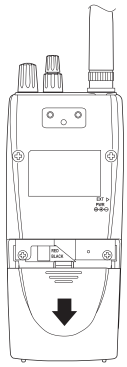
Care and Maintenance

Replacing the Battery Pack

1. Turn the On-Off/Volume Control OFF.
2. Turn the scanner over so you are looking at the back. If the Belt clip is attached, remove it by taking out the two screws.



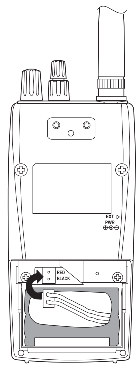
3. Press in on the ribbed area and slide the Battery Cover down and off.



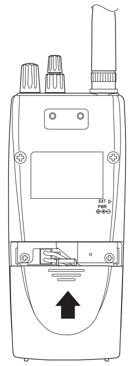
4. Carefully unplug the Battery pack and lift it out of the case. You may need to exert slight pressure toward the top of the scanner as you slide the Battery Pack out of the case.

5. Carefully plug in the new Battery Pack, observing the proper polarity. (The **RED** wire should be on the upper side as you plug it in.) Although the plug is keyed to reduce the chance of inserting it in wrong, make sure the wires are in the correct position before pushing it in all the way. **DO NOT FORCE THE PLUG**.

6. Insert the Battery Pack by placing the bottom in the case first. Make sure it is seated within the case before replacing the Battery Cover.



7. Replace the Battery Cover by putting the two tabs in the corresponding opening and sliding it upward until it locks in place.



Location

- If strong interference or electrical noise is received, relocate the scanner or its antenna away from the source of the noise. A higher elevation, if possible, may provide better reception.
- **Do not** use the scanner in high-moisture environments such as the kitchen or bathroom.
- Avoid placing the unit in direct sunlight or near heating elements or vents.
- **Do not** plug the scanner into an outlet controlled by a wall switch as prolonged periods without power will cause scanner memory loss.

Cleaning

- Disconnect the power to the unit before cleaning.
- Clean the outside of the scanner with a mild detergent.
- To prevent scratches, **do not** use abrasive cleaners or solvents. Be careful not to rub the LCD window.
- **Do not** use excessive amounts of water.

Birdies

All scanners are subject to receiving undesired signals or birdies. If your scanner stops during SEARCH Mode and no sound is heard, it may be receiving a birdie. Birdies are internally generated signals inherent in the electronics of the scanner. Use the Search Skip feature to skip the unwanted frequencies.

Proper Care of Your Scanner

Use only the AC Adapter/Charger that came with your scanner.

Do not leave the AC Adapter/Charger plugged in for long periods.

Avoid placing the scanner in direct sunlight or near heating elements or vents.

Also, do not expose the scanner to continuous sub-zero temperatures. If the scanner is exposed to temperatures below -20°C or above +60°C, the liquid crystal display may temporarily cease to function properly, or can become permanently damaged.

Optional Accessories and Replacement Parts

ITEM	PART NO.
Spare Battery Pack	BP-180
Replacement Rubber Antenna	AT-396
Earphone	EP-009
AC Adapter/Charger	AD-235
Straight Cigarette Lighter Power Cord (fused)	UA-502
Coiled Cigarette Lighter Power Cord (fused)	UA-502A
Belt Clip with 2 screws	BCK-150
AE180H Operating Guide	OM AE180H

Troubleshooting

If your **AE180H** is not performing properly, try the steps listed below.

PROBLEM	SOLUTION
Scanner won't work.	Check the power connections. Check the volume and squelch. Make sure the power switch is turned on.
Improper reception.	Check the antenna connection. You may be in a fringe area. Reposition the scanner.
Scan won't stop.	Adjust the Squelch Control. Check the antenna connection. It is possible that none of the programmed frequencies are active at the time. Try Band Search.
Scan won't start.	Make sure there are some programmed channels. Adjust the Squelch Control.
Search won't start.	Adjust the Squelch Control.
Keypad won't work.	Check the Keypad Lock.

Technical Specifications

Receiver Type: Triple Conversion Superheterodyne

Channels: **100**

Banks: Total 10 Banks
10 Channels each

Search Bands: 13 Preprogrammed Search bands
(FM or AM)

No.	RANGE (MHz)	BAND	STEP (kHz)
1	25.0000-84.0100	FM	5
2	84.0150-87.2550	FM	20 with 15 kHz offset
3	108.0000-136.9916	AM	12.5/8.33 selectable
4	137.0000-143.9950	FM	5
5	144.0000-145.9875	FM	12.5
6	146.0000-155.9900	FM	10
7	156.0000-162.0250	FM	12.5
8	162.0300-173.9900	FM	10
9	406.0000-439.9875	FM	12.5
10	440.0000-449.9875	FM	12.5
11	450.0000-469.9900	FM	10
12	470.0000-512.0000	FM	12.5
13	806.0000-960.0000	FM	12.5

Scan Rate: 100 channels per sec.

Search Rate: 100 steps per sec.(Normal Search Mode)
300 steps per sec.(Turbo Search Mode)

Scan Delay: 2 seconds

Audio Output: 180 mW nominal into 8Ω internal speaker
38 mW nominal into 32Ω stereo headphones
9 mW nominal into 64Ω supplied earphone

Antenna: Rubber antenna included

Operating Temperature: - 20°C (- 4°F) to + 60°C (+ 140°F)

Size:	2-1/2" (W) x 1-3/4" (D) x 11-3/4" (H) (with antenna attached) 65 mm (W) x 39.5 mm (D) x 296.5 mm (H) (w/antenna w/o belt clip)
Weight:	0.71 lb. (320 g)
Power Requirements:	4.8V DC (internal battery or AC Adapter/Charger)

Features, specifications, and availability of optional accessories are all subject to change without notice.

Declaration of Conformity

We:

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Daimlerstr. 1 k - D-63303 Dreieich

declare, under our sole responsibility, that this equipment "Albrecht Sportscan AE180H" is in compliance with the essential requirements and other relevant provisions of the EMC, R&TTE and LVD Council Directive of the EU.

MEMO

MEMO

Color profile: Disabled
Composite Default screen

UBZZ01302BZ

Printed in China

Y:...UB302BH(AE180H).vp
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